

language and mapping the generated word vectors for each word of the second language to the vector space of the second language.

8. The apparatus of claim 6, wherein a machine learning algorithm used during machine learning is one of a neural network, a decision tree, a genetic algorithm (GA), a genetic programming (GP), a Gaussian process regression, a linear discriminant analysis (LDA), a K-near neighbor (K-NN), a perceptron algorithm, a radial basis function network, a support vector machine (SVM), and deep-learning.

9. The apparatus of claim 1, wherein the matching model is a model for matching the first word vector space to a second word vector space that is related to the second language.

10. The apparatus of claim 9, wherein the matching model is built in advance through machine learning by using language resources that define a relation between the first and second languages.

11. The apparatus of claim 10, wherein the language resources include at least one of a synonym dictionary or a thesaurus.

12. The apparatus of claim 10, wherein the determined translation word is not predefined as a translation by the language resources.

13. A method of determining a translation word, the method comprising:

generating a word vector corresponding to an input word of a first language with reference to a first word vector space that is related to the first language;

determining a word vector of a second language, wherein the determined word vector of the second language corresponds to the generated word vector, by using a matching model; and

selecting a translation word of the second language, wherein the selected transition word corresponds to the input word of the first language, based on the determined word vector of the second language.

14. The method of claim 13, further comprising receiving the input word of the first language.

15. The method of claim 13, wherein the selecting of the translation word comprises:

selecting a word vector, wherein the selected word vector is the most similar to the determined word vector of the second language, from among word vectors on a second word vector space that is related to the second language; and

selecting, as the translation word, a word of the second language, wherein the word of the second language corresponds to the selected word vector.

16. The method of claim 15, wherein the selecting of the word vector, wherein the selected word vector is the most similar to the determined word vector of the second language, comprises:

selecting the word vector, which is the most similar to the determined word vector of the second language, from among the word vectors on the second word vector space by using at least one of a distance measurement function, a similarity measurement function, or a correlation coefficient.

17. The method of claim 16, wherein the distance measurement function is one of Euclidean distance, Mahalanobis distance, or Hamming distance;

the similarity measurement function is cosine similarity; and

the correlation coefficient is one of Pearson correlation coefficient, Spearman correlation coefficient, partial correlation coefficient, or Cronbach's alpha.

18. The method of claim 15, wherein the first word vector space is built in advance using machine learning using a first language corpus; and

the second word vector space is built in advance using machine learning using a second language corpus.

19. The method of claim 18, wherein the first word vector space is built by generating word vectors for each word of the first language and mapping the generated word vectors for each word of the first language to the vector space of the first language, and wherein the second word vector space is built by generating word vectors for each word of the second language and mapping the generated word vectors for each word of the second language to the vector space of the second language.

20. The method of claim 18, wherein a machine learning algorithm used during machine learning is one of a neural network, a decision tree, a genetic algorithm (GA), a genetic programming (GP), a Gaussian process regression, a linear discriminant analysis (LDA), a K-near neighbor (K-NN), a perceptron algorithm, a radial basis function network, a support vector machine (SVM), and deep-learning.

21. The method of claim 13, wherein the matching model is a model for matching the first word vector space to a second word vector space that is related to the second language.

22. The method of claim 21, wherein the matching model is built in advance through machine learning by using language resources that define a relation between the first and second languages.

23. The method of claim 22, wherein the language resources include at least one of a synonym dictionary or a thesaurus.

24. The method of claim 22, wherein the determined translation word is not predefined as a translation by the language resources.

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